

ANNUAL REPORT OF THE IUIS NOMENCLATURE COMMITTEE (2014-2015) by Pablo Engel

Mission

The mission of the different IUIS Nomenclature subcommittees is to establish a universal and consistent nomenclature for both molecules and cells of the immune system.



Main goal

The main goal is to create a unambiguous, flexible, informative, neutral nomenclature, and if possible easy to remember and simple, in order to facilitate the communication between scientists in the fields of immunology and biomedicine. It is of key importance to establish a common language for diagnosis and therapy of diseases related to alterations of the immune system and also basic research.

Accomplishments

The IUIS subcommittees have been establishing the nomenclature of different molecules of the immune system during more than 20 years.

More recently, new committees have been also created for the nomenclature of cells and cellular subsets.

Current IUIS Nomenclature Subcommittees and chairs

Allergen Nomenclature. Chair: Rick Goodman (USA)
(web page: www.allergen.org)



CD Nomenclature. Chair: Pablo Engel (Spain)
(web page: www.hcdm.org)



IG, TR and MH Nomenclature. Chair Marie-Paule Lefranc (France)
(web page: www.imgt.org)



Monocytes and Dendritic Cells in Blood. Chair: Loems Ziegler-Heitbrock (Germany)



KIR Nomenclature. Chair: Steve Marsh (UK)
(web page: www.ebi.ac.uk/ipd/kir)



Complement. Chair: Andrea Tenner (USA)
(web page: www.complement.org)



B cells and plasma cells. Chair: Ignacio Sanz (USA)



Atypical chemokine receptors Chair Phil Murphy (USA)



MALT Nomenclature. Chair: Per Brandtzaeg (Norway)



The IUIS nomenclature is proposed by the Nomenclature subcommittees after wet workshops, classical or virtual meetings. The subcommittee should seek approval for their proposed consensus nomenclature during the annual IUIS council meeting.

Publications (2014-2015) Nomenclature and position papers

- Radauer C, Nandy A, Ferreira F, Goodman RE, Larsen JN, Lidholm J, Pomés A, Raulf-Heimsoth M, Rozynek P, Thomas WR, Breiteneder H. Update of the WHO/IUIS Allergen Nomenclature Database based on analysis of allergen sequences. *Allergy*, 2014, 69(4):413-419; is an open access publication.
- Breiteneder H, Chapman MD. Allergen Nomenclature. In *Allergens and Allergen Immunotherapy: Subcutaneous, sublingual and oral*. 5th Edition. Edited by Richard F. Lockey and Dennis K. Ledford. CRC Press, Taylor and Francis Group, Boca Raton, Florida, USA, 2014, pp 37-49.
- Lefranc MP. Immunoglobulin and T Cell Receptor Genes: IMGT(®) and the Birth and Rise of Immunoinformatics. *Front Immunol*. 2014;5:22.
- Lefranc MP. Immunoinformatics of the V, C, and G domains: IMGT® definitive system for IG, TR and IgSF, MH, and MhSF. *Methods Mol Biol*. 2014;1184:59-107.
- Alamyar E, Giudicelli V, Duroux P, Lefranc MP. Antibody V and C domain sequence, structure, and interaction analysis with special reference to IMGT®. *Methods Mol Biol*. 2014;1131:337-81.
- Robinson J, Halliwell JA, Marsh SG. IMGT/HLA and the Immuno Polymorphism Database. *Methods Mol Biol*. 2014;1184:109-21.
- Bachelier F, Graham GJ, Locati M, Mantovani A, Murphy PM, Nibbs R, Rot A, Sozzani S, Thelen M. New nomenclature for atypical chemokine receptors. *Nat Immunol*. 2014;15:207-8. doi: 10.1038/ni.2812.
- Bachelier F, Graham GJ, Locati M, Mantovani A, Murphy PM, Nibbs R, Rot A, Sozzani S, Thelen M. An atypical addition to the chemokine receptor nomenclature: IUPHAR Review 15. *Br J Pharmacol*. 2015;172:3945-9.
- Lefranc MP, Giudicelli V, Duroux P, Jabado-Michaloud J, Folch G, Aouinti S, Carillon E, Duvergey H, Houles A, Paysan-Lafosse T, Hadi-Saljoqi S, Sasorith S, Lefranc G, Kossida S. IMGT®, the international ImMunoGeneTics information system® 25 years on. *Nucleic Acids Res*. 2015; 43(Database issue):D413-22.
- Robinson J, Halliwell JA, Hayhurst JD, Flicek P, Parham P, Marsh SG. The IPD and IMGT/HLA database: allele variant databases. *Nucleic Acids Res*. 2015;43(Database issue):D423-31.
- Engel P, Boumsell L, Balderas R, Bensussan A, Gattei G, Horejsi V, Jin BQ, Malavasi F, Mortari F, Schwartz-Albiez R, Stockinger H, van Zelm M, Zola, Clark G. CD Nomenclature 2015. Human Leukocyte Differentiation Antigen (HLDA) Workshops as a driving force in immunology. *J Immunol*. 2015 (in press)

Future Directions

- 1) **Continue the work of current Nomenclature subcommittees**
- 2) **Create new Nomenclature subcommittees to cover all the molecules and cells of the immune system**

A new subcommittee should consist of scientists coming from various parts of the world, well known in a specific field, and endorsed by their society or the scientific community.

The new subcommittee has to have a list of members in order to build standing committees.

- 3) **To disseminate the approved Nomenclature to the scientific community** using the IUIS web side.

Approval and proposal of new Nomenclature Subcommittees at the 63rd IUIS Council Meeting

Innate Lymphocytes Chair: Marco Colonna (USA)

Board to be determined:

Publication: Spits H, Artis D, Colonna M, Dieffenbach A, Di Santo JP, Eberl G, Koyasu S, Locksley RM, McKenzie AN, Mebius RE, Powrie F, Vivier E. Innate lymphoid cells--a proposal for uniform nomenclature. Nat Rev Immunol. 2013;13:145-9

Cytokines and Interferons

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(<http://cytokines-interferons.org/>) Chair and board to be determined: